

## Fur Seals and Sea Lions

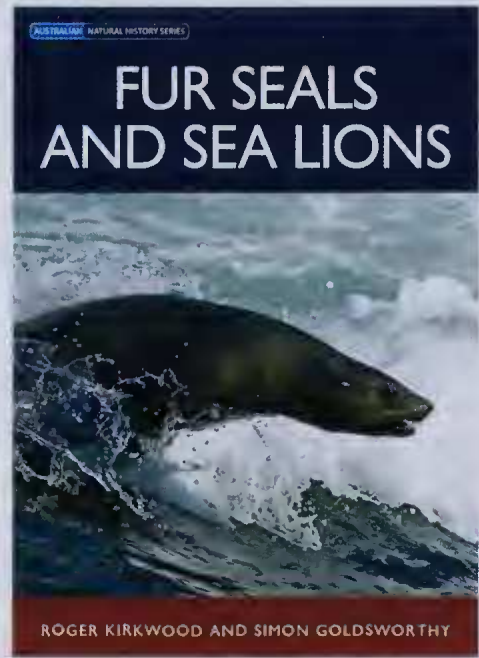
by Roger Kirkwood and  
Simon Goldsworthy

Publisher: CSIRO Publishing, Collingwood,  
2013. 160 pages, paperback, colour plates,  
ISBN 9780643096929. RRP \$39.95

When I first opened Kirkwood and Goldsworthy's *Fur Seals and Sea Lions*, I had intended to do little more than flick briefly through its pages, perhaps taking a glimpse at the Table of Contents. An hour later, I found myself thoroughly engrossed. Roger Kirkwood and Simon Goldsworthy know their pinnipeds (seals), and both have published extensively on this group of marine mammals. Here, they focus on otariids (fur seals and sea lions) that breed along the coast of southern Australia, though species that breed in Australian subantarctic and Antarctic territories also are described briefly.

The book draws on recent research and historical information to provide a fascinating summary of the history, ecology and physiology of southern Australian seals, as well as the factors, both potential and realised, that threaten them. The introduction in Chapter One presents a brief account of the discovery and subsequent decline of seals due to harvesting in the region, and describes the marine habitat of southern Australia. Chapter Two summarises the evolution, taxonomic history and harvesting of seals. An absorbing discussion of morphological and physiological adaptations to the challenges posed by life in the marine ecosystem is presented in Chapter Three, while Chapter Four provides descriptions of the various species likely to be encountered in southern Australian waters. This chapter equips the reader with the necessary information to aid in seal identification.

The reproductive biology of the various species is well covered in Chapter Five. Here, the behaviour and reproductive physiology of both pups and adults during the breeding, pup provisioning and weaning periods are discussed in detail, including the asynchronous, extended



breeding period of Australian sea lions, and theories behind its evolution. Chapter Six describes the diets and foraging strategies of the three species, as well as methods needed to study these parameters, even including photos of the identifiable ear bones of fish that are recovered from scats in dietary analyses. Similarly, the challenges presented in estimating population size and trends are included in a discussion of otariid population biology in Chapter Seven. In this section, population trends are inferred from historic and current information, and an interesting section on population genetics is included. A discussion of the role of pathogens and parasites in regulating seal populations leads nicely into the final chapter on the conservation and management issues facing southern Australian seals.

*Fur Seals and Sea Lions* is written mainly for the interested layperson, though some sections assume a degree of background biological knowledge. The book is generally well written and structured, with subheadings allowing the reader to quickly identify particular sections of interest. However, the book's main strength lies in the variety of topics it covers. It answers

many of the questions I have asked over the years and even some that I had yet to realise I had—until their answers were revealed in the book. The comparison of otariid morphology is extremely useful to all who have ever wondered which species of fur seal they have encountered.

Grey-scale figures and tables scattered throughout the book enhance the discussion in the text but the colour plates near the end of the book are particularly appealing. These illustrate well the information provided in the text, and are at once fascinating and confronting. They include photos of seals at play on land, in the water and beneath the surface, a visual comparison of different age and sex classes of the three species, and the birthing of a pup. One

plate even offers a rare glimpse of an Australian sea lion instrumented with a crittercam at sea. Several photos of seals entangled in a variety of materials reinforce the impacts of humans on seals, and some of the issues facing the conservation and management of these charismatic marine animals.

Overall, I found this book thoroughly enjoyable; it was easy to read, relevant and engaging. It would complement any natural history library and I recommend it to anyone with an interest in marine mammals, as well as anyone without—this book will surely pique the interest of even the most indifferent reader.

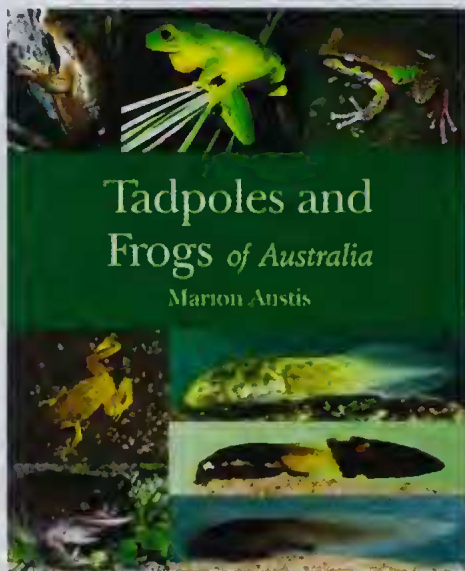
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## Tadpoles and Frogs of Australia

by Marion Anstis

Publisher: New Holland, Sydney. 2013.  
831 pages, hardcover, colour photographs,  
monochrome technical drawings, ISBN  
9781921517310. RRP \$125 (\$145 for the  
limited edition, ISBN 9781921517167, signed,  
individually numbered)

Few natural processes engage the young (and not-so-young) budding zoologist as much as the triphasic lifecycle of a typical frog. From egg to tadpole to young frog, many have watched in wonder. So it is a little surprising that guides to Australian frogs typically provide only cursory mention of the eggs and tadpoles of each species. That changed around a decade ago when Marion Anstis produced the first definitive guide to the eggs and larvae of a cohort of Australian frogs: *Tadpoles of South-eastern Australia: A Guide with Keys*. Although that book 'raised the bar' for amphibian field guides in this country, Anstis was not satisfied by either the modern crop of frog books, or even her own seminal work. She was determined to produce a book that covered in detail all lifecycle



phases of *all* Australian amphibians—a monumental task! *Tadpoles and Frogs of Australia* is the culmination of that vision. This book is not intended to be a field guide—it is a full-blown, comprehensive reference book, and has the physical stature to match. It is wonderfully large and heavy and, in an era of e-books and online publications, for a bibliophile like me this tome